

ABSTRACT OF THE DISCLOSURE

A method for coating free-standing micromechanical devices using spin-coating. A solution with high solids loading but low viscosity can penetrate the free areas of a micromachined structure. Spinning this solution off the wafer or die results in film formation over the devices without the expected damage from capillary action. If an organic polymer is used as the solid component, the structures may be re-released by a traditional ash process. This method may be used as a process in the manufacture of micromechanical devices to protect released and tested structures, and to overcome stiction-related deformation of micromechanical devices associated with wet release processes.